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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,160	12/20/2001	Kurt A. Estes	9793070-0439	1693

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EXAMINER

WEBB, GREGORY E

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 07/09/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

10/027,160

Applicant(s)

ESTES ET AL.

Examiner

Gregory E. Webb

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-52 is/are pending in the application.
- 4a) Of the above claim(s) 53-78 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

1. The examiner has agreed with several arguments presented by the applicant via the appeal brief submitted 4-29-03. Additional references and explanations are presented in the following action to further clarify these issues.
2. In view of the appeal brief filed on 4-29-03, PROSECUTION IS HEREBY REOPENED. Rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 21-22, 25-38, 40, 41, and 44-50 remain rejected under 35 U.S.C. 102(b) as being anticipated by Maekawa et al (US 5,133,802).
2. Claims 21-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Jackson et al (US 4,004,048).

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3. Jackson teaches treating compositions containing fluorocarbons. Jackson teaches various suitable fluorocarbons and that the fluorocarbons can be blended (see col. 4, lines 21-46).

4. Jackson teaches specific fluorocarbons including perfluorotrialkyl amines (as per claims 23 and 42). Jackson also teaches perfluoroethers as suitable fluorinated compound. This compound thus meets the limitations the applicant has set forth as a "cosolvent" (see also example 3 demonstrating a mixture of fluorinated compounds).

5. Additionally, Jackson teaches the use of hydrofluoroethers as suitable fluorinated solvents and thus meets the limitation of claim 39 (example 1).

6. To further clarify the examiner's logic, in instant claim 23, the examiner reads the amine to be the working fluid and the perfluoroether to be a co-solvent. In claim 39, the examiner is interpreting the hydrofluoroether to be the working fluid and the perfluoroether to be the co-solvent. Any of the perfluoroether, hydrofluoroethers or perfluoroamines would broadly meet the applicant's claim to a "washing additive." In fact almost any solvent known to the field of chemistry would meet the broad limitation of being either a hydrophobic solvent or a hydrophilic solvent. As such, the simple blends of solvents taught by Jackson read on each and every claim presented by the applicant.

7. Claims 21-38, and 40-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokuyama (JP 405064521A).

8. These rejections are maintained for those reasons set forth in papers #4 and #9. Previous rejections to claims 39, 51, and 52 are withdrawn based on the applicant's arguments. The examiner agrees that these rejections were not supported as the prior art failed to teach the required hydrofluoroether.

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9. Claims 21, 22, 24-41, and 43-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Barthelemy et al (US 5,304,320).

10. Barthelemy teaches cleaning compositions containing fluoroethers (see abstract).

Barthelemy teaches mixtures of compounds including difluoromethoxy-2,2,2-trifluoroethane and 1,1-dichloro-1-fluoroethane (see col. 3, lines 10-19). Barthelemy teaches the addition of surfactants to these compositions (see col. 3, lines 60-68). Barthelemy teaches these composition for cleaning a variety of substrates including plastics (see col. 4, lines 14-46; noting that many textiles are made from polymeric material). In Table III, Barthelemy teaches various compositions including those containing cosolvents such as polyols and water (i.e. noting that water changes conductivity; see table III).

11. Claims 21, 22, 24-26, 28-41, 43-45, and 47-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Minor (US 5,480,572).

12. Minor teaches cleaning compositions containing a three carbon cyclic fluoroether (see col. 1, lines 10-20).

13. Minor teaches in claim 1 a composition containing 80-99% 2,2,4,4-tetrafluorooxethane (ether cosolvent) and 1-20% 1-difluoromethoxy-1,1,2,2-tetrafluoroethane (hydrofluoroether; see col. 3, line 59). Minor further teaches the addition of surfactants and esters (washing additive and co-solvent; see col. 12, lines 55-65).

14. Claims 21, 22, 24-26, 28-41, 43-45, and 47-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Klug et al (US 5,605,882).

15. Klug teaches compositions containing a fluoroether (working fluid) and a hydrofluorocarbon (hydrophobic washing additive; see abstract). Klug further teaches these

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compositions for cleaning substrates (see col. 1, lines 15-25). In claim 1 Klug teaches a composition containing 23-74% pentafluorodimethyl ether (hydrofluoroether) and difluoromethane (hydrophobic washing additive). Klug further teaches additives including surfactants (washing additive) and esters (co-solvent; see col. 88, lines 55-61).

16. Claims 21-38, and 40-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Zabotto et al (US 5,154,854).

17. Zabotto teaches stable emulsion (see abstract). Zabotto teaches the stable emulsion for use as a cleaning agent (see col. 4, lines 26-48). In example 6, Zabotto teaches a composition containing perfluorotributylamine (working fluid), water (co-solvent), salts (ionic strength modifying agent), and a sugar. In claim 2, Zabotto teaches various additives including alcohols, amines, and surface active agents (i.e. surfactants).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 703-305-4945. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 703-308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9310 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.



Gregory E. Webb  
Primary Examiner  
Art Unit 1751

gw  
July 2, 2003